# Maryland HIV/AIDS Quarterly Update

# Third Quarter 2016 Data reported through September 30, 2016



Center for HIV Surveillance, Epidemiology and Evaluation
Infectious Disease Epidemiology and Outbreak Response Bureau
Prevention and Health Promotion Administration
Maryland Department of Health and Mental Hygiene
http://phpa.dhmh.maryland.gov/oideor/chse
1-800-358-9001



#### **TABLE OF CONTENTS**

Section I – Background Information	. 1
Section I – Background Information	1
For Assistance with HIV/AIDS Reporting	2
Limitations in the HIV/AIDS Data	2
Stages of a Case of HIV/AIDS	વ
Changes in Case Terminology	3
Laboratory Data	4
Changes in Case Terminology Laboratory Data Sources of Data	. 4
Tabulation of Column Totals	. 4
Tabulation of Column Totals	4
Glossary of Terms	. 4
Section II - Adult/Adolescent Cases by Jurisdiction	. 6
Table 1 – Adult/Adolescent HIV Diagnoses during 1/1/2015-12/31/2015, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Jurisdiction, Reported through 6/30/2016	
Table 2 – Adult/Adolescent AIDS Diagnoses during 1/1/2015-12/31/2015, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction, Reported through 6/30/2016	
Table 3 – Adult/Adolescent HIV Cases Alive on 12/31/2015, by Jurisdiction, Reported through 6/30/2016	
Table 4 - CD4 Test Results for Adult/Adolescent HIV Cases Alive on 12/31/2015, Reported through 6/30/2016	
Table 5 – Viral Load Test Results for Adult/Adolescent HIV Cases Alive on 12/31/2015, by Jurisdiction, Reported through 6/30/2016	10

### Section I - Background Information

#### **HIV/AIDS** Reporting Requirements

The Maryland HIV/AIDS Reporting Act of 2007 went into effect on April 24, 2007. The law expanded HIV/AIDS reporting and required that HIV cases be reported by name. The following highlights the reporting requirements of Health-General Articles 18-201.1, 18-202.1, and 18-205 of the Annotated Code of Maryland, as specified in COMAR 10.18.02.

- Physicians are required to report patients in their care with diagnoses of HIV or AIDS immediately to the Local Health Department where the physician's office is located by mailing DHMH Form 1140. Reports are also accepted by phone.
- Physicians are required to report infants born to HIV positive mothers within 48 hours to the State Health Department by mailing DHMH Form 1140. Reports are also accepted by phone.
- Clinical and infection control practitioners in hospitals, nursing homes, hospice facilities, medical clinics in
  correctional facilities, inpatient psychiatric facilities, and inpatient drug rehabilitation facilities are required to report
  patients in the care of the institution with diagnoses of HIV or AIDS within 48 hours to the Local Health
  Department where the institution is located by mailing DHMH Form 1140. Reports are also accepted by phone.

Facilities with large volumes are encouraged to contact the State Health Department to establish electronic reporting.

Laboratory directors are required to report patients with laboratory results indicating HIV infection (e.g., positive
confirmatory HIV diagnostic tests, all CD4 immunological tests, all HIV viral load tests, and all HIV genotype and
phenotype tests) within 48 hours to the Local Health Department where the laboratory is located, or if out of state
to the Maryland State Health Department, by mailing DHMH Form 4492. Laboratories are encouraged to contact
the State Health Department to establish electronic reporting.

Reporting forms and instructions are available on our website: http://phpa.dhmh.maryland.gov/oideor/chse/sitepages/reporting-material.aspx

#### For Assistance with HIV/AIDS Reporting

For assistance with reporting, including establishment of routine, electronic, or other alternate methods of reporting to the Health Department, please contact the Center for HIV Surveillance, Epidemiology and Evaluation in the Maryland Department of Health and Mental Hygiene at 410-767-5227.

#### **Limitations in the HIV/AIDS Data**

This epidemiological profile only contains data for HIV and AIDS cases that have been diagnosed by a health care provider, were reported to the health department by name, and were residents of Maryland at the time of diagnosis. Nationally, it has been estimated that 12.8% of people living with HIV infection are undiagnosed. In Maryland, it is estimated that 18.7% of people living with HIV infection are undiagnosed. In addition, despite a massive effort during which over 17,000 HIV cases were reported after the Maryland HIV reporting law changed on April 24, 2007, not all diagnosed HIV cases previously reported by Maryland's code-based identifier were located and re-reported by name. In addition, many of the re-reported HIV cases were identified by a recent diagnosis and not by their earliest diagnosis, resulting in an under-reporting of HIV diagnoses before 2001 and an over-reporting of HIV diagnoses from 2001 to 2008. Caution should be exercised in using the number of living HIV cases without AIDS and in interpreting trends in the number of reported HIV diagnoses. Furthermore, laboratory data are only available for cases receiving medical care, usually only at facilities in Maryland, and only includes test results that have been reported to the health department.

Please note that not all data has been geocoded in the quarterly reports and therefore is preliminary. Geocoding is the process of assigning geographic identifiers to map features and data records. Addresses are standard data elements required by law and submitted as part of reporting requirements; however, the information may be incomplete which then requires a geocoding process to improve the quality of data. This process is fully completed on the end-of-the-year data set.

#### Stages of a Case of HIV/AIDS

Untreated HIV disease progresses from HIV infection to AIDS to death. These are biological events that occur whether or not a person receives any medical care. For example, a person can be HIV infected but never have an HIV test and so they do not have an HIV diagnosis. A medical provider diagnoses that these biological events have occurred and records them as a medical event. The law requires medical providers to report these medical events to the Health Department, thereby creating a surveillance event.

Time Point	Biological Event	Medical Event	Surveillance Event
1	HIV Infection		
2		HIV Diagnosis	
3			HIV Report
4	AIDS Conditions		
5		AIDS Diagnosis	
6			AIDS Report
7	Death		
8		Death Diagnosis	
9			Death Report

For surveillance purposes, a case of HIV/AIDS can only move through time in one direction, from HIV infection to death report [from time point 1 to time point 9], but may skip over individual stages. Events can occur simultaneously, but usually there is a time lag between them. The time lag between events can be measured in days, months, or years.

For example, the time between HIV infection [time point 1] and the test that diagnoses HIV [time point 2] may be several years, and it may then take several days for the laboratory and physician to report the diagnosis to the health department [time point 3]. In a second example, a person with diagnosed and reported HIV infection [time point 3] may die [time point 7] without developing AIDS, thereby skipping the three AIDS events (conditions, diagnosis, and report [time point 4, 5 and 6]). And in a third example, a person with undiagnosed HIV infection [time point 1] may become sick, enter the hospital, and die [time point 7] of what is later determined to be AIDS. In that situation, HIV diagnosis [time point 2], AIDS diagnosis [time point 5], and death diagnosis [time point 8] would all occur at the same time, and that would have been many years after the initial HIV infection [time point 1].

#### **Changes in Case Terminology**

The terminology for HIV and AIDS cases was changed from earlier epidemiological profiles to be more precise, with Reported Diagnoses replacing Incidence and Living Cases replacing Prevalence. Incidence is a measure of the number of new events (such as HIV infections) in a population during a period of time. Prevalence is a measure of the number of people living with a condition (such as HIV) in a population at a certain time. Prevalence includes both new and old diagnosed cases as well as undiagnosed infections. For HIV, Incidence and Prevalence cannot be directly measured and must be estimated using statistical methods. The HIV surveillance system is able to provide the actual number of diagnoses and deaths that are reported in the population.

For this epidemiological profile, the reports received through a certain time (a quarter-year) are used to generate the number of diagnoses during the prior years. This six-month lag allows for delays in reporting and time to complete investigations. For example, the Reported HIV Diagnoses for 3/1/2015-3/31/2016 are the total of the reported HIV cases with or without an AIDS diagnosis, diagnosed with HIV during 3/1/2015-3/31/2016, as reported by name through 9/30/2016.

To calculate the number of Living Cases we count up all of the Reported Diagnoses from the beginning of the epidemic (all the Reported HIV Diagnoses each year) and subtract all of the Reported Deaths. For example, the Total Living HIV Cases on 3/31/2016 are the total of the reported HIV Cases with or without an AIDS diagnosis and not reported to have died as of 3/31/2016 as reported by name through 9/30/2016.

#### **Laboratory Data**

CD4+ T-lymphocyte tests are measures of a person's immune system function. An HIV infected adult is considered to have AIDS if they have less than 200 CD4 cells per microliter of blood. Viral load (VL) tests are measures of the amount of HIV in a person's body. The goal of HIV treatment is to have a very low number of copies of virus per milliliter of blood, below what the test can measure, which is called an undetectable level. Treatment recommendations are that a person in HIV medical care should have their CD4 and VL levels measured regularly, at least once per year. We use the presence of these lab tests as an indicator that someone has been "linked to care" initially after diagnosis or in following years that they remain "in care".

#### **Sources of Data**

Information on HIV and AIDS diagnoses, including residence at diagnosis, age, race/ethnicity, sex at birth, country of birth, vital status, HIV exposure category, and CD4 and HIV viral load test results are from the Maryland Department of Health and Mental Hygiene's Enhanced HIV/AIDS Reporting System (eHARS), June 30, 2016.

Population data by sex, age, and race/ethnicity are from the July 1, 2015 U.S. Census Estimates. Due to estimation limitations, some population totals may not equal the sum of its components.

#### **Tabulation of Column Totals**

Figures in tables and generally in the text have been rounded. Discrepancies in tables between totals and sums of components are due to rounding.

#### **Data Suppression**

In order to protect the confidentiality of reported HIV cases, data are suppressed in the following instances:

- Data describing a demographic group or geographic area (e.g. ZIP code) with a population less than 1,000 people.
- All clinical/laboratory information if it is describing less than 5 cases.
- All exposure/risk information if it is describing less than 5 cases, except in the case of "other" exposure.
- If any cell is suppressed, additional cells are also suppressed as necessary to prevent back calculation of the suppressed cell(s).

#### **Glossary of Terms**

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of 12/31/2015.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of 12/31/2015.

**Adult/Adolescent Reported AIDS Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of 12/31/2015.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

First CD4 Test Result: First reported CD4 test result obtained within 12 months following initial HIV diagnosis.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at the later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Mean Years from HIV Diagnosis (to AIDS Diagnosis):** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

Median: The measure of central location which divides a set of data into two equal parts.

**Median Count (First CD4):** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Median Count (Recent CD4):** Median CD4 count (cells per microliter) of the most recent CD4 test result reported in the 12 months prior to 12/31/2015.

**Median Unsuppressed (Viral Load):** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with a most recent viral load test result reported in the 12 months prior to 12/31/2015 of 200 copies per milliliter or greater.

**Percent Late HIV Diagnosis (for AIDS diagnoses):** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

**Percent Late HIV Diagnosis (for HIV diagnoses):** Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

**Percent Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

**Percent Suppressed (Viral Load):** Percent of adult/adolescent total living HIV cases with a most recent viral load reported in the 12 months prior to 12/31/2015 of less than 200 copies per milliliter.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2014.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Recent CD4 Test Result: The most recent CD4 test result reported in the 12 months prior to 12/31/2015.

Recent Viral Load Test Result: The most recent viral load test result reported in the 12 months prior to 12/31/2015.

**Suggested Citation:** Maryland HIV/AIDS Quarterly Update, Third Quarter 2016. Baltimore, MD: Center for HIV Surveillance, Epidemiology and Evaluation, Infectious Disease Epidemiology and Outbreak Response Bureau, Prevention and Health Promotion Administration, Maryland Department of Health and Mental Hygiene. September 2016.

## Section II – Adult/Adolescent Cases by Jurisdiction

Table 1 – Adult/Adolescent HIV Diagnoses during 3/1/2015-3/31/2016, First CD4 Test Result, Percent Linked to Care, and Percent Late Diagnosis, by Jurisdiction, Reported through 9/30/2016

JURISDICTION		Adult/Adolescent Reported HIV Diagnoses								
OF RESIDENCE	Population		0/ <b>af</b>			CD4 Test Ro		% Linked	% Late	
AT HIV DIAGNOSIS	Age 13+	No.	% of Total	Rate	No. with Test	% with Test	Median Count	to Care	HIV Diagnosis	
Allegany	63,523	2	0.2%	3.1	***	***	***	***	***	
Anne Arundel	472,498	59	4.7%	12.5	51	86.4%	291	84.7%	30.5%	
Baltimore City	523,202	311	24.6%	59.4	253	81.4%	402	86.2%	20.9%	
Baltimore	701,736	149	11.8%	21.2	128	85.9%	422	88.6%	24.2%	
Calvert	76,074	1	0.1%	1.3	***	***	***	***	***	
Caroline	27,119	2	0.2%	7.4	***	***	***	***	***	
Carroll	142,863	4	0.3%	2.8	***	***	***	***	***	
Cecil	85,936	3	0.2%	3.5	***	***	***	***	***	
Charles	129,678	32	2.5%	24.7	27	84.4%	352	78.1%	25.0%	
Dorchester	27,278	11	0.9%	40.3	10	90.9%	164	90.9%	63.6%	
Frederick	204,660	13	1.0%	6.4	10	76.9%	455	84.6%	7.7%	
Garrett	25,567	2	0.2%	7.8	***	***	***	***	***	
Harford	210,992	12	1.0%	5.7	8	66.7%	160	75.0%	41.7%	
Howard	260,100	28	2.2%	10.8	23	82.1%	343	85.7%	25.0%	
Kent	17,436	1	0.1%	5.7	***	***	***	***	***	
Montgomery	864,331	199	15.8%	23.0	169	84.9%	369	87.4%	25.1%	
Prince George's	758,979	357	28.3%	47.0	300	84.0%	373	84.3%	20.7%	
Queen Anne's	41,518	2	0.2%	4.8	***	***	***	***	***	
Saint Mary's	91,688	4	0.3%	4.4	***	***	***	***	***	
Somerset	22,563	3	0.2%	13.3	***	***	***	***	***	
Talbot	32,559	4	0.3%	12.3	***	***	***	***	***	
Washington	126,168	11	0.9%	8.7	8	72.7%	421	81.8%	18.2%	
Wicomico	86,317	17	1.3%	19.7	13	76.5%	280	76.5%	29.4%	
Worcester	45,221	3	0.2%	6.6	***	***	***	***	***	
Corrections		32	2.5%		28	87.5%	468	75.0%	6.3%	
TOTAL	5,038,007	1,262	100.0%	25.0	1,053	83.4%	376	85.4%	22.9%	

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

**Adult/Adolescent Reported HIV Diagnoses:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial HIV diagnosis during the specified year.

Jurisdiction of Residence at HIV Diagnosis: Jurisdiction of residence at time of initial HIV diagnosis.

**Population Age 13+:** Population age 13 years or older, estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

First CD4 Test Result: First reported CD4 test result obtained within 12 months following initial HIV diagnosis.

**Median Count (First CD4):** Median CD4 count (cells per microliter) of the first CD4 test result reported within 12 months following initial HIV diagnosis.

**Percent Linked to Care:** Percent of adult/adolescent reported HIV diagnoses with a CD4 or viral load test performed less than or equal to 3 months after their initial HIV diagnosis.

Percent Late HIV Diagnosis (for HIV diagnoses): Percent of adult/adolescent reported HIV diagnoses with an initial AIDS diagnosis less than or equal to 12 months after their initial HIV diagnosis.

Table 2 – Adult/Adolescent AIDS Diagnoses during 3/1/2015-3/31/2016, Mean Years from HIV Diagnosis and Percent Late HIV Diagnosis, by Jurisdiction, Reported through 9/30/2016

JURISDICTION			Adult/Adolesc	ent Reported All	DS Diagnoses	
OF RESIDENCE AT AIDS DIAGNOSIS	Population Age 13+	No.	% of Total	Rate	Mean Years from HIV Diagnosis	% Late HIV Diagnosis
Allegany	63,523	1	0.2%	1.6	***	***
Anne Arundel	472,498	31	4.9%	6.6	3.4	64.5%
Baltimore City	523,202	204	32.5%	39.0	5.4	36.8%
Baltimore	701,736	88	14.0%	12.5	5.5	43.2%
Calvert	76,074	1	0.2%	1.3	***	***
Caroline	27,119	2	0.3%	7.4	***	***
Carroll	142,863	2	0.3%	1.4	***	***
Cecil	85,936	2	0.3%	2.3	***	***
Charles	129,678	13	2.1%	10.0	3.8	61.5%
Dorchester	27,278	9	1.4%	33.0	5.6	55.6%
Frederick	204,660	3	0.5%	1.5	***	***
Garrett	25,567	0	0.0%	0.0		
Harford	210,992	9	1.4%	4.3	0.6	88.9%
Howard	260,100	14	2.2%	5.4	3.9	50.0%
Kent	17,436	3	0.5%	17.2	***	***
Montgomery	864,331	75	12.0%	8.7	2.9	65.3%
Prince George's	758,979	147	23.4%	19.4	3.9	53.1%
Queen Anne's	41,518	1	0.2%	2.4	***	***
Saint Mary's	91,688	3	0.5%	3.3	***	***
Somerset	22,563	2	0.3%	8.9	***	***
Talbot	32,559	0	0.0%	0.0		-
Washington	126,168	2	0.3%	1.6	***	***
Wicomico	86,317	7	1.1%	8.1	4.4	57.1%
Worcester	45,221	2	0.3%	4.4	***	***
Corrections		6	1.0%		7.9	50.0%
TOTAL	5,038,007	627	100.0%	12.4	4.5	49.1%

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

Adult/Adolescent Reported AIDS Diagnoses: Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an initial AIDS diagnosis during the specified year.

Jurisdiction of Residence at AIDS Diagnosis: Jurisdiction of residence at time of initial AIDS diagnosis.

Population Age 13+: Population age 13 years or older, estimate for 7/1/2015.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

**Mean Years from HIV Diagnosis (to AIDS Diagnosis):** Mean number of years from initial HIV diagnosis to initial AIDS diagnosis for cases with a reported AIDS diagnosis.

**Percent Late HIV Diagnosis (for AIDS diagnoses):** Percent of adult/adolescent reported AIDS diagnoses with an initial HIV diagnosis less than or equal to 12 months prior to their initial AIDS diagnosis.

Table 3 – Adult/Adolescent HIV Cases Alive on 3/31/2016, by Jurisdiction, Reported through 9/30/2016

JURISDICTION OF RESIDENCE	Population Age 13+	Adult/Adolescent Living HIV Cases without AIDS		Adult/Adolescent Living HIV Cases with AIDS			Adult/Adolescent Total Living HIV Cases			es	
AT DIAGNOSIS	Age 10+	No.	% of Total	Rate	No.	% of Total	Rate	No.	% of Total	Rate	Ratio (1 in X)
Allegany	63,523	42	0.3%	66.1	32	0.2%	50.4	74	0.2%	116.5	858
Anne Arundel	472,498	568	3.8%	120.2	675	4.0%	142.9	1,243	3.9%	263.1	380
Baltimore City	523,202	5,368	35.9%	1,026.0	6,606	38.7%	1,262.6	11,974	37.4%	2,288.6	43
Baltimore	701,736	1,559	10.4%	222.2	1,739	10.2%	247.8	3,298	10.3%	470.0	212
Calvert	76,074	47	0.3%	61.8	50	0.3%	65.7	97	0.3%	127.5	784
Caroline	27,119	30	0.2%	110.6	35	0.2%	129.1	65	0.2%	239.7	417
Carroll	142,863	62	0.4%	43.4	71	0.4%	49.7	133	0.4%	93.1	1,074
Cecil	85,936	50	0.3%	58.2	60	0.4%	69.8	110	0.3%	128.0	781
Charles	129,678	254	1.7%	195.9	201	1.2%	155.0	455	1.4%	350.9	285
Dorchester	27,278	42	0.3%	154.0	83	0.5%	304.3	125	0.4%	458.2	218
Frederick	204,660	172	1.2%	84.0	156	0.9%	76.2	328	1.0%	160.3	623
Garrett	25,567	5	0.0%	19.6	3	0.0%	11.7	8	0.0%	31.3	3,195
Harford	210,992	189	1.3%	89.6	233	1.4%	110.4	422	1.3%	200.0	499
Howard	260,100	259	1.7%	99.6	255	1.5%	98.0	514	1.6%	197.6	506
Kent	17,436	15	0.1%	86.0	21	0.1%	120.4	36	0.1%	206.5	484
Montgomery	864,331	1,924	12.9%	222.6	2,073	12.1%	239.8	3,997	12.5%	462.4	216
Prince George's	758,979	3,406	22.8%	448.8	3,500	20.5%	461.1	6,906	21.6%	909.9	109
Queen Anne's	41,518	15	0.1%	36.1	34	0.2%	81.9	49	0.2%	118.0	847
Saint Mary's	91,688	63	0.4%	68.7	66	0.4%	72.0	129	0.4%	140.7	710
Somerset	22,563	24	0.2%	106.4	31	0.2%	137.4	55	0.2%	243.8	410
Talbot	32,559	28	0.2%	86.0	32	0.2%	98.3	60	0.2%	184.3	542
Washington	126,168	171	1.1%	135.5	129	0.8%	102.2	300	0.9%	237.8	420
Wicomico	86,317	105	0.7%	121.6	109	0.6%	126.3	214	0.7%	247.9	403
Worcester	45,221	30	0.2%	66.3	47	0.3%	103.9	77	0.2%	170.3	587
Corrections		520	3.5%		847	5.0%		1,367	4.3%		
TOTAL	5,038,007	14,948	100.0%	296.7	17,088	100.0%	339.2	32,036	100.0%	635.9	157

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

Population Age 13+: Population greater than or equal to 13 years old, estimate for 7/1/2015.

**Adult/Adolescent Living HIV Cases without AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, without an AIDS diagnosis, and not reported to have died as of 3/31/2016.

**Adult/Adolescent Living HIV Cases with AIDS:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with an AIDS diagnosis, and not reported to have died as of 3/31/2016.

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of 3/31/2016.

**Rate:** A proportion used to represent risk for disease within a given population. It is calculated by dividing the number of diagnoses by the number of persons at risk (population estimate).

Ratio (1 in X): Number of people for every 1 living HIV case in the population, or 1 living HIV case in every X number of people.

Table 4 – CD4 Test Results for Adult/Adolescent HIV Cases Alive on 3/31/2016, Reported through 9/30/2016

JURISDICTION OF	Adult/Adolescent Total Living HIV Cases											
RESIDENCE AT	Recent CD4 Test Result											
DIAGNOSIS	No.	No. with Test	% with Test	Median Count	<200	200-349	350-499	500+				
Allegany	74	50	67.6%	708	4.0%	6.0%	20.0%	70.0%				
Anne Arundel	1,243	737	59.3%	545	12.1%	15.1%	18.0%	54.8%				
Baltimore City	11,974	6,808	56.9%	530	14.0%	14.6%	17.8%	53.6%				
Baltimore	3,298	1,934	58.6%	555	12.5%	13.5%	17.2%	56.8%				
Calvert	97	68	70.1%	594	7.4%	16.2%	8.8%	67.6%				
Caroline	65	28	43.1%	498	7.1%	25.0%	17.9%	50.0%				
Carroll	133	68	51.1%	535	17.6%	17.6%	7.4%	57.4%				
Cecil	110	52	47.3%	543	0.0%	26.9%	17.3%	55.8%				
Charles	455	274	60.2%	586	8.8%	13.5%	18.2%	59.5%				
Dorchester	125	82	65.6%	516	11.0%	19.5%	17.1%	52.4%				
Frederick	328	185	56.4%	565	8.1%	10.8%	20.0%	61.1%				
Garrett	8	5	62.5%	635	0.0%	20.0%	0.0%	80.0%				
Harford	422	247	58.5%	567	13.8%	16.6%	13.4%	56.3%				
Howard	514	294	57.2%	566	12.6%	15.6%	13.9%	57.8%				
Kent	36	22	61.1%	477	9.1%	22.7%	22.7%	45.5%				
Montgomery	3,997	2,120	53.0%	543	9.2%	14.9%	20.1%	55.8%				
Prince George's	6,906	3,837	55.6%	538	11.2%	13.8%	19.6%	55.4%				
Queen Anne's	49	28	57.1%	534	17.9%	10.7%	10.7%	60.7%				
Saint Mary's	129	84	65.1%	516	9.5%	20.2%	20.2%	50.0%				
Somerset	55	37	67.3%	587	8.1%	13.5%	16.2%	62.2%				
Talbot	60	33	55.0%	507	21.2%	15.2%	9.1%	54.5%				
Washington	300	157	52.3%	717	8.3%	7.6%	12.1%	72.0%				
Wicomico	214	127	59.3%	562	15.7%	11.0%	18.1%	55.1%				
Worcester	77	54	70.1%	542	14.8%	7.4%	14.8%	63.0%				
Corrections	1,367	779	57.0%	481	18.1%	16.8%	16.9%	48.1%				
TOTAL	32,036	18,110	56.5%	540	12.5%	14.5%	18.1%	55.0%				

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of 3/31/2016.

Recent CD4 Test Result: The most recent CD4 test result reported in the 12 months prior to 3/31/2016.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

**Median Count (Recent CD4):** Median CD4 count (cells per microliter) of the most recent CD4 test result reported in the 12 months prior to 3/31/2016.

CD4 Result Distribution (<200, 200-349, 350-499, 500+): Percent of cases with a CD4 test distributed by their CD4 count results (cells per microliter).

Table 5 – Viral Load Test Results for Adult/Adolescent HIV Cases Alive on 3/31/2016, by Jurisdiction, Reported through 9/30/2016

	Adult/Adolescent Total Living HIV Cases								
JURISDICTION OF RESIDENCE AT		Recent Viral Load Test Result							
DIAGNOSIS	No.	No. with Test	% with Test	% Suppressed	Median Unsuppressed				
Allegany	74	51	68.9%	96.1%	22,422				
Anne Arundel	1,243	684	55.0%	75.7%	10,712				
Baltimore City	11,974	6,242	52.1%	71.7%	12,130				
Baltimore	3,298	1,797	54.5%	76.4%	12,625				
Calvert	97	69	71.1%	85.5%	38,480				
Caroline	65	31	47.7%	87.1%	2,228				
Carroll	133	69	51.9%	87.0%	58,539				
Cecil	110	52	47.3%	80.8%	4,335				
Charles	455	277	60.9%	76.2%	11,512				
Dorchester	125	81	64.8%	82.7%	5,276				
Frederick	328	195	59.5%	86.7%	7,684				
Garrett	8	***	***	***	***				
Harford	422	225	53.3%	81.3%	18,719				
Howard	514	291	56.6%	80.1%	22,718				
Kent	36	21	58.3%	85.7%	8,900				
Montgomery	3,997	2,104	52.6%	85.0%	12,490				
Prince George's	6,906	3,817	55.3%	80.5%	15,709				
Queen Anne's	49	***	***	***	***				
Saint Mary's	129	75	58.1%	80.0%	22,549				
Somerset	55	38	69.1%	86.8%	20,370				
Talbot	60	36	60.0%	75.0%	14,515				
Washington	300	158	52.7%	86.1%	1,255				
Wicomico	214	124	57.9%	77.4%	18,382				
Worcester	77	52	67.5%	90.4%	20,390				
Corrections	1,367	616	45.1%	61.9%	12,150				
TOTAL	32,036	17,136	53.5%	76.8%	13,040				

<sup>\*\*\*</sup> Data withheld due to low population counts and/or case counts

**Adult/Adolescent Total Living HIV Cases:** Reported HIV diagnoses, age 13 years or older at HIV diagnosis, with or without an AIDS diagnosis, and not reported to have died as of 3/31/2016.

**Jurisdiction of Residence at Diagnosis:** Jurisdiction of residence at later of time of initial HIV diagnosis or time of initial AIDS diagnosis.

Recent Viral Load Test Result: The most recent viral load test result reported in the 12 months prior to 3/31/2016.

**Percent Suppressed (Viral Load):** Percent of adult/adolescent total living HIV cases with a most recent viral load reported in the 12 months prior to 3/31/2016 of less than 200 copies per milliliter.

**Median Unsuppressed (Viral Load):** Median unsuppressed viral load (copies per milliliter) among adult/adolescent living HIV cases with a most recent viral load test result reported in the 12 months prior to 3/31/2016 of 200 copies per milliliter or greater.